

5190-5195

TROUGH HOLE (ANNULAR) HEAVY CAPACITY LOAD CELL

Annular compression load cell.

Model 5195 - 3 MN - F



Features

- Low profile for high capacity load cells
- Material : Stainless steel (5190) or nickel plated steel (5195)
- Protection IP 65
- Sturdy design
- Cable length: See drawing's table (CL)
- Most important available options:
 - o Custom made dimensions
 - o High service temperature (up to 180 °C)
 - o ATEX intrinsic safety Ex II 1GD Ex ia IIC T6 or T4 Ga Ex ia IIIC T80 °C Da
 - o redundant dual Wheatstone bridge
 - o amplified output (V or mA) and digital output signal (RS-232C, RS-485, USB)

Applications

The load cells 5190-5195 are perfectly designed to the following applications :

- Pre-stressed rods measurement (concrete, snow, grounds, rocks....)
- Industrial force applications where space is limited

Capacities

5190 - 5195 : 200 - 300 - 500 kN - (0.75) - 1 - 1.5 - 2 - 3 - 5 MN

5195 : 10 - 15 - 20 - 30 MN

Specifications	SL	
Repeatability error	< ± 0.25	% F.S.
Creep error over 30 min.	< ± 0.3	% F.S.
Zero shift after loading	< ± 0.5	% F.S.
Reference temperature	23	°C
Nominal temperature range	-10...+45	°C
Service temperature range	-30...+70	°C
Storage temperature range	-50...+85	°C
Temperature coefficient of the sensitivity	< ± 0.2	% F.S./10 °C
Temperature coefficient of zero signal	< ± 0.2	% F.S./10 °C
Zero balance	± 0.02	mV/V
Insulation resistance (50V)	> 5000	Megaohm
Reference excitation voltage	10	VDC
Nominal range of excitation voltage	3..12	VDC
Nominal sensitivity	1.5	mV/V
Safe load limit	150	% F.S.
Breaking load	> 300	% F.S.
Static lateral force limit	25	% F.S.
Permissible dynamic loading	50	% F.S.
Input resistance	702 ± 2	Ohm
Output resistance	702 ± 2	Ohm

F.S.: full scale - Specifications subject to change without notice

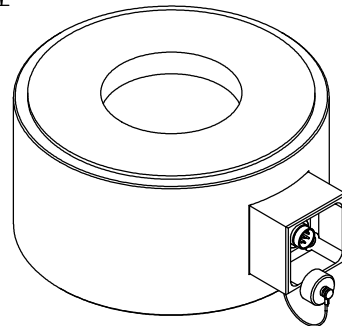
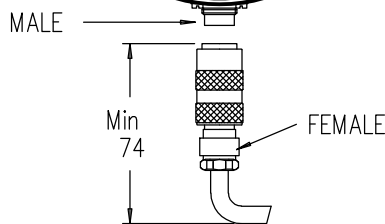
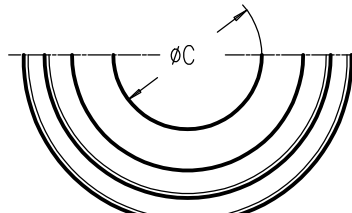
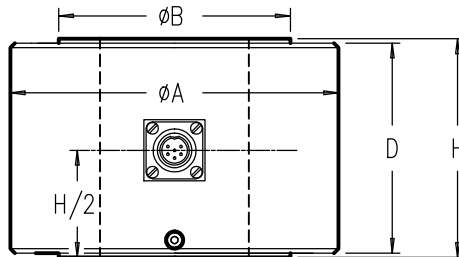
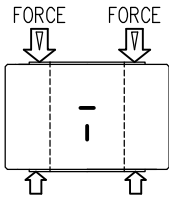
LOAD CELL

model 5190 stainless steel
 model 5195 alloy steel

COMPRESSION WASHER

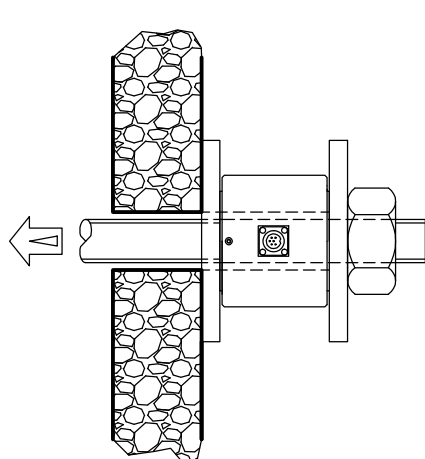
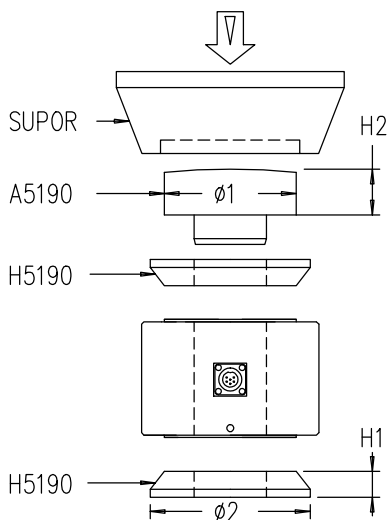


Range 200 kN– 20 MN IP65 Cable length : See table (CL)
 (20 - 2000 t.)



MODEL	CAPACITIES	$\phi A^{+0.1}$	ϕB	ϕC	D	H	H1	H2	$\phi 1$	$\phi 2$	Max.Deflexion	CL	Weight
5190-5195	200-300 kN	60	49	20	66	70	22	30	45	57	0.08 mm	3 m	1.4 kg
	500 kN	80	59	30	66	90	28	40	56	66	0.1 mm	6 m	3.2 kg
	0.75-1 MN	110	89	50	81	100	40	50	90	97	0.12 mm	12 m	5.5 kg
	1.5-2 MN	150	120	64	96	140	50	60	125	129	0.15 mm		17 kg
	3 MN	180	155	80	124	160	65	75	165	172	0.17 mm		26 kg
5 MN	230	200	105	150	190	75	90	200	225	0.2 mm	50 kg		
5195	10 MN	290	150	/	260	60	130	300	387	0.3 mm	20 m	100 kg	
	15 MN	340	165	/	290	80	150	350	480	0.34 mm		175 kg	
	20 MN	390	200	/	330	110	175	395	545	0.38 mm		260 kg	

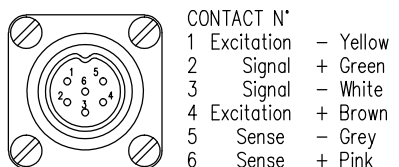
Other dimensions $\phi A, \phi B$ and H on request



Pressure < or = 30 kg/mm/2

Pressure < or = 20 kg/mm/2

FEMALE-MALE CONNECTOR DIN 45322



Standard : Cable screen not connected to transducer
 Option f : Cable screen connected to transducer